



# Survey123 Part 2

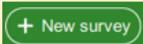
February 9, 2021

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## 1. Where did we leave off? A quick Refresher

- 1 Click on  in Survey123 Connect. Set the title to "Survey123 Part 2 Survey"
- 2 Click on Advanced Template and then on 
- 3 Add the following questions:
- 4 Format the yes\_no choice list on the choices worksheet as shown below:
- 5 Save the Excel spreadsheet, leave your survey open

list_name	name	label
yes_no	Yes	Yes
yes_no	No	No

type	name	label
note	InfoAboutYou	Some information about you
text	Name	What is your name?
text	Zipcode	What is your zipcode?
note	InfoAboutWork	Some information about your work
text	Agency	Which agency do you work at?
integer	YearsAtAgency	How many years have you been with this agency?
note	InfoAboutGIS	Some information about your GIS experience
select_one yes_no	FamiliarWithAGOL	Are your familiar with ArcGIS Online?
select_one yes_no	FamiliarWithSurvey123	Are your familiar with Survey123?
select_one yes_no	FamiliarWithDashboards	Are you familiar with Dashboards?

Hint: check the Copy and Paste Snippets.xlsx spreadsheet to copy and paste those questions into your spreadsheet

## 2. File Attachments

- 1 One the Excel spreadsheet for your survey add the following question:

	type	name	label
12	file	Resume	Please attach your resume

- 2 Save your spreadsheet and try out the new question

### 3. Repeats. And should you?

- 1 Modify your Excel spreadsheet to include the repeat
- 2 Save your spreadsheet and look how the question works inside the Survey123 Connect app

	A	B	C
1	<b>type</b>	<b>name</b>	<b>label</b>
2	note	InfoAboutYou	Some information about you
3	text	Name	What is your name?
4	text	Zipcode	What is your zipcode?
5	note	InfoAboutWork	Some information about your work
6			
7	begin repeat	RepeatWorkedAt	Please list all the agencies you have worked at
8	text	Agency	Which agency have your worked at?
9	integer	YearsAtAgency	How many years have you been with this agency?
10	end repeat		
11			
12	note	InfoAboutGIS	Some information about your GIS experience
13	select_one yes_no	FamiliarWithAGOL	Are your familiar with ArcGIS Online?
14	select_one yes_no	FamiliarWithSurvey123	Are your familiar with Survey123?
15	select_one yes_no	FamiliarWithDashboards	Are you familiar with Dashboards?
16	file	Resume	Please attach your resume

### 4. Useful functions

In the first example we will use **string-length** function to only show the next question when a text field is populated

`string-length( ${ } )>0`

- 1 In cell M4 (for the Zipcode question) enter `string-length(${Name})>0`

	A	B	C	D	M
1	<b>type</b>	<b>name</b>	<b>label</b>	<b>hint</b>	<b>relevant</b>
2	note	InfoAboutYou	Some information about you		
3	text	Name	What is your name?		
4	text	Zipcode	What is your zipcode?		string-length(\${Name})>0

- 2 What behavior do you expect? Save the Excel spreadsheet and see if it works as expected

## 4. Useful functions

In the first example we will use **if** function to see how many GIS competencies someone has

**If ( condition, what happens if true, what happens if false)**

- 3 Add the following lines at the bottom of your spreadsheet:

	type	name	label
18	integer	AGOLCompetent	AGOLCompetent
19	integer	Survey123Competent	Survey123Competent
20	integer	DashboardCompetent	DashboardCompetent
21	integer	GISCompetencies	Number of GIS Competencies

Hint: check the Copy and Paste Snippets.xlsx spreadsheet to copy and paste those questions into your spreadsheet

## 4. Useful functions

Recall this question: 

13	select_one yes_no	FamiliarWithAGOL	Are you familiar with ArcGIS Online?
----	-------------------	------------------	--------------------------------------

- 4 Enter to following calculation for the AGOLCompetent question

	type	name	label	hint	calculation
18	integer	AGOLCompetent	AGOLCompetent		if(\$ {FamiliarWithAGOL} = 'Yes',1,0)

**If ( condition , what happens if true, what happens if false)**

**If ( \$ {FamiliarWithAGOL} = 'Yes' , 1 , 0)**

## 4. Useful functions

- Also enter the calculations for the other two competencies (hint: copy and paste the calculation you just entered, and then replace the name in the  $\{ \}$  and the addition to add up all the competencies

18	integer	AGOLCompetent	AGOLCompetent	$\text{if}(\{\text{FamiliarWithAGOL}\} = \text{'Yes'},1,0)$
19	integer	Survey123Competent	Survey123Competent	$\text{if}(\{\text{FamiliarWithSurvey123}\} = \text{'Yes'},1,0)$
20	integer	DashboardCompetent	DashboardCompetent	$\text{if}(\{\text{FamiliarWithDashboards}\} = \text{'Yes'},1,0)$
21	integer	GISCompetencies	Number of GIS Competencies	$\{\text{AGOLCompetent}\} + \{\text{Survey123Competent}\} + \{\text{DashboardCompetent}\}$

- Save your spreadsheet and then test out your survey in Survey123 Connect. Does it accurately add up all the competencies?

Hint: check the Copy and Paste Snippets.xlsx spreadsheet to copy and paste those questions into your spreadsheet

## 5. Groups, Pages and Grids

To make surveys easier to “digest” for survey takers we can divide the survey into different **groups** or **pages**.

**Groups** are controlled by the “begin group” and “end group” data types.

- Make the following edits (hint: “note” changed into “begin group”) and additions to your spreadsheet. All changes are highlighted in orange
- Save your excel spreadsheet and observe the effect on your survey

2	begin group	InfoAboutYou	Some information about you
3	text	Name	What is your name?
4	text	Zipcode	What is your zipcode?
5	note	InfoAboutWork	Some information about your work
6	end group		
7			
8	begin repeat	RepeatWorkedAt	Please list all the agencies you have worked at
9	text	Agency	Which agency have you worked at?
10	integer	YearsAtAgency	How many years have you been with this agency?
11	end repeat		
12			
13	begin group	InfoAboutGIS	Some information about your GIS experience
14	select_one yes_no	FamiliarWithAGOL	Are you familiar with ArcGIS Online?
15	select_one yes_no	FamiliarWithSurvey123	Are you familiar with Survey123?
16	select_one yes_no	FamiliarWithDashboards	Are you familiar with Dashboards?
17	file	Resume	Please attach your resume
18	end group		

## 5. Groups, Pages and Grids

- 3 Set the appearance for the begin group line: to "minimal compact". Save the spreadsheet and compare the changes.

	A	B	C	D	E
	type	name	label	hint	appearance
2	begin group	InfoAboutYou	Some information about you		minimal compact
3	text	Name	What is your name?		
4	text	Zipcode	What is your zipcode?		
5	note	InfoAboutWork	Some information about your work		
6	end group				
7					
8	begin repeat	RepeatWorkedAt	Please list all the agencies you have worked at		
9	text	Agency	Which agency have your worked at?		
10	integer	YearsAtAgency	How many years have you been with this agency?		
11	end repeat				
12					
13	begin group	InfoAboutGIS	Some information about your GIS experience		minimal compact
14	select_one yes_no	FamiliarWithAGOL	Are your familiar with ArcGIS Online?		
15	select_one yes_no	FamiliarWithSurvey123	Are your familiar with Survey123?		
16	select_one yes_no	FamiliarWithDashboards	Are you familiar with Dashboards?		
17	file	Resume	Please attach your resume		
18	end group				

## 5. Groups, Pages and Grids: Pages

Pages are also controlled by the "begin group" and "end group" data types.

	A	B	C	D	E
	type	name	label	hint	appearance
2	begin group	InfoAboutYou	Some information about you		field-list
3	text	Name	What is your name?		
4	text	Zipcode	What is your zipcode?		
5	note	InfoAboutWork	Some information about your work		
6	end group				
7					
8	begin repeat	RepeatWorkedAt	Please list all the agencies you have worked at		
9	text	Agency	Which agency have your worked at?		
10	integer	YearsAtAgency	How many years have you been with this agency?		
11	end repeat				
12					
13	begin group	InfoAboutGIS	Some information about your GIS experience		field-list
14	select_one yes_no	FamiliarWithAGOL	Are your familiar with ArcGIS Online?		
15	select_one yes_no	FamiliarWithSurvey123	Are your familiar with Survey123?		
16	select_one yes_no	FamiliarWithDashboards	Are you familiar with Dashboards?		
17	file	Resume	Please attach your resume		
18	end group				

- 4 Change the appearance to "field-list"

## 5. Groups, Pages and Grids: Pages

5 Go to the settings worksheet survey choices settings

6 Set the style to "pages"

	A	B	C	D	E	F	G
1	form_title	form_id	instance_name	submission_url	default_language	version	style
2	Survey title not set						pages

7 Save your excel spreadsheet and observe the changes in your survey. Are you missing questions?

8 On the Survey worksheet move the last "end group" to the bottom of the survey. Save your spreadsheet and test your survey again

13	begin group	InfoAboutGIS	Some information about your GIS experience				
14	select_one yes_no	FamiliarWithAGOL	Are you familiar with ArcGIS Online?				
15	select_one yes_no	FamiliarWithSurvey123	Are you familiar with Survey123?				
16	select_one yes_no	FamiliarWithDashboards	Are you familiar with Dashboards?				
17	file	Resume	Please attach your resume				
18							
19							
20	hidden	AGOLCompetent	AGOLCompetent				
21	hidden	Survey123Competent	Survey123Competent				
22	hidden	DashboardCompetent	DashboardCompetent				
23	integer	GISCompetencies	Number of GIS Competencies				
24	end group						

## 5. Groups, Pages and Grids: Grids

9 On the settings worksheet set the style to "theme-grid" survey choices settings

	A	B	C	D	E	F	G
1	form_title	form_id	instance_name	submission_url	default_language	version	style
2	Survey title not set						theme-grid

	A	B	C	D	E
1	type	name	label	hint	appearance
2	begin group	InfoAboutYou	Some information about you		w2
3	text	Name	What is your name?		
4	text	Zipcode	What is your zipcode?		
5	note	InfoAboutWork	Some information about your work		
6	end group				
7					
8	begin repeat	RepeatWorkedAt	Please list all the agencies you have worked at		
9	text	Agency	Which agency have you worked at?		
10	integer	YearsAtAgency	How many years have you been with this agency?		
11	end repeat				
12					
13	begin group	InfoAboutGIS	Some information about your GIS experience		w3
14	select_one yes_no	FamiliarWithAGOL	Are you familiar with ArcGIS Online?		
15	select_one yes_no	FamiliarWithSurvey123	Are you familiar with Survey123?		
16	select_one yes_no	FamiliarWithDashboards	Are you familiar with Dashboards?		
17	file	Resume	Please attach your resume		

10 Change the appearance for the begin group type to w2 (for two columns) and w3 (for three columns) respectively.

From Ismael Chivite's [excellent blog](#):

### Grids: XLSForm Basics

To arrange questions in a grid layout, you first need to set the *style* of your survey to *theme-grid*. This is done in the *settings* sheet of your XLSForm.

form_title	form_id	instance_name	submission_url	style
My Survey				theme-grid

Once the *theme-grid* is set, all groups within your survey will contain questions using a four-column grid layout. You can change the number of columns in a grid by simply adding the *w* (as in width) property to the appearance column of your group. For example, *w2* means two columns, *w8* means eight columns.

name	type	label	appearance
text	hh_id	Household ID	
<b>begin group</b>	<b>hh_group</b>	Household Information	w2
geopoint	hh_loc	GPS Location	
hidden	hh_addr	Address	
text	hh_city	City	
text	hh_zip	ZIP Code	
<b>end group</b>			

Unless specified otherwise, questions within a group will always take one column of the grid. In the example above, the GPS Location and Address will be placed side by side in one row, and the City and ZIP Code will complete a second row.

Using the *w* property for the individual questions within the group, you can choose how many columns you want each question to take. In the example below, I gave two columns (one full row, since the grid has two columns) to the GPS Location question, and another full row (two columns) to the address. I then arranged the City and ZIP Code questions side by side giving them a *w1* appearance.

name	type	label	appearance
text	hh_id	Household ID	
<b>begin group</b>	<b>hh_group</b>	Household Information	field-list w2
geopoint	hh_loc	GPS Location	w2
hidden	hh_addr	Address	w2
text	hh_city	City	w1
text	hh_zip	ZIP Code	w1
<b>end group</b>			

## 6. HTML Code

1 You can change the color and font of your survey. Try the following:

	A	B	C
1	<b>type</b>	<b>name</b>	<b>label</b>
2	begin group	InfoAboutYou	<b><i>Some information about you</b></i>

2 Try the following:

	A	B	C
1	<b>type</b>	<b>name</b>	<b>label</b>
2	begin group	InfoAboutYou	<font color='green'>Some information about you</font>

[https://www.w3schools.com/colors/colors\\_names.asp](https://www.w3schools.com/colors/colors_names.asp)

3 Try the following

	B	C
	<b>name</b>	<b>label</b>
	InfoAboutYou	<body bgcolor = 'ivory'><font color='green'>Some information about you</font></body>

- <b>: start bold font
- </b>: end bold font
- <i>: start italics
- <font color='green'>: start changing font. Set the color property to the color green
- </font>: end changing the font
- <body bgcolor='ivory'>: start changing the body, set background color to ivory
- </body>: end changing the body

Resources to learn more about HTML Code:

1. Reference worksheet in your survey spreadsheet
2. Colors: [https://www.w3schools.com/colors/colors\\_names.asp](https://www.w3schools.com/colors/colors_names.asp)
3. Font Properties: [https://www.tutorialspoint.com/html/html\\_fonts.htm](https://www.tutorialspoint.com/html/html_fonts.htm)

## 7. PullData Tables

1 Click on **+ New survey** in Survey123 Connect. Set the title to "Boise Primary Care Doctors"

2 Click on Advanced Template and then on **Create survey**

3 Add the following questions:

type	name	label
select_one Name	<u>DoctorsName</u>	What is the physician's name?
integer	NPI	What is your NPI Number?
text	Address	What is your Address?
text	Gender	What is your Gender?
text	Accepting	Accepting or Not Accepting New Patients?
text	<u>LanguageSpoken</u>	What Language do you speak?

Hint: check the Copy and Paste Snippets.xlsx spreadsheet to copy and paste those questions into your spreadsheet

## 7. PullData Tables

- 4 What happens when you try to save? Click the square to close the error message.
- 5 Open the Providers.csv in MS Excel.
- 6 Note the list of names - those are the ones that people should pick from in the first question. Use Copy and Paste to create the list on the Choices Worksheet
- 7 Save the Excel spreadsheet with the questions again.



	A	B	C
1	list_name	name	label
2			
3	Name	Allyson Reynolds	Allyson Reynolds
4	Name	Amos Haley	Amos Haley
5	Name	Anna Martsenyuk	Anna Martsenyuk
6	Name	Anna Teresa Gabiola Shelton	Anna Teresa Gabiola Shelton
7	Name	Anthony Jordan	Anthony Jordan
8	Name	April Dillion-Bialobrzkeski	April Dillion-Bialobrzkeski
9	Name	Becky Kroll	Becky Kroll
10	Name	Bradley Wrobel	Bradley Wrobel
11	Name	Brady Hamilton	Brady Hamilton

## 7. PullData Tables

- 8 Since the list of names in the Survey is rather long and awkward, change the Appearance (back on the "survey" worksheet to Autocomplete)

Note that once a survey-taker enters their name, we can pre-populate all the other questions with info from this table

C	D	E
label	hint	appearance
What is the physician's name?		autocomplete

Survey title not set

What is the physician's name?

What is your NPI Number?

What is your Address?

What is your Gender?

Accepting or Not Accepting New Patients?

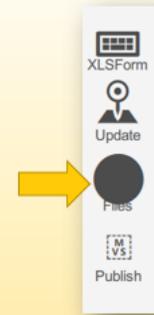
What Language do you speak?

Provider.csv:

	A	B	C	D	E	F	G	H	I
1	NPI	Name	Description	Accepting	Gender	Language	USPSAddress	Lat	Long
2	1033154828	Noreen Womack	Primary Care	accepting	Female	English	100 E Idaho St, Boise, Idaho, 83712	43.6122501	-116.1944022
3	1285940965	Jeri Spencer	Primary Care	accepting	Female	English	100 E Warm Springs Ave, Boise, Idaho, 83712	43.61149797	-116.195194
4	1073542056	Phyllis Tezeno-Burris	Primary Care	not accepting	Female	English	1000 E Park Blvd, Boise, Idaho, 83712	43.6027088	-116.1875241
5	1417389628	James Farmer	Primary Care	accepting	Male	English	1000 N Curtis Rd, Boise, Idaho, 83706	43.61376735	-116.2535926
6	1962443101	Mark Turner	Primary Care	accepting	Male	English	10020 W Fairview Ave, Boise, Idaho, 83704	43.6195492	-116.3069774

## 7. PullData Tables

- 9 In order to use the table, we need to store the table with the survey. Click on Files in the Survey123 Connect application.



All files associated with a survey are stored in the media folder.

- 10 Copy the provider.csv table into this media folder

## 7. PullData Tables

- 11 In cell J3 type `pulldata('Providers','NPI','Name',{DoctorsName})`

	A	B	C	D	J
1	type	name	label	hint	calculation
2	select_one Name	DoctorsName	What is the physician's name?		
3	integer	NPINumber	What is your NPI Number?		pulldata('Providers','NPI','Name',{DoctorsName})
4	text	Address	What is your Address?		
5	text	Gender	What is your Gender?		
6	text	Accepting	Accepting or Not Accepting New Patients?		
7	text	LanguageSpoken	What Language do you speak?		

## 7. PullData Tables

11 In cells J4-J7 type the pulldata functions we just constructed:

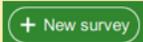
	A	B	C	D	J
1	<b>type</b>	<b>name</b>	<b>label</b>	<b>hint</b>	<b>calculation</b>
2	select_one Name	DoctorsName	What is the physician's name?		
3	integer	NPINumber	What is your NPI Number?		pulldata('Providers','NPI','Name',{DoctorsName})
4	text	Address	What is your Address?		pulldata('Providers','USPSAddress','Name',{DoctorsName})
5	text	Gender	What is your Gender?		pulldata('Providers','Gender','Name',{DoctorsName})
6	text	Accepting	Accepting or Not Accepting New Patients?		pulldata('Providers','Accepting','Name',{DoctorsName})
7	text	LanguageSpoken	What Language do you speak?		pulldata('Providers','Language','Name',{DoctorsName})

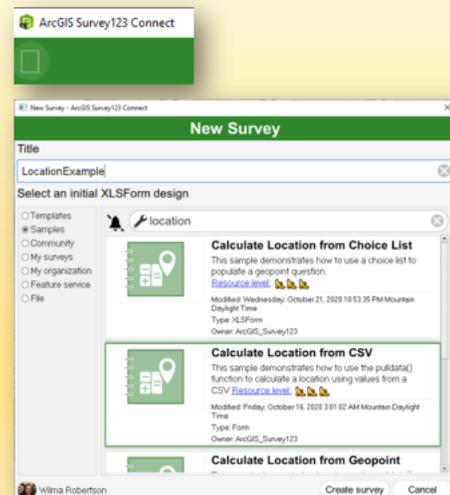
12 Save your Excel file and test out the behavior of your survey. Does it pre-fill with information once you select a name?

Hint: check the Copy and Paste Snippets.xlsx spreadsheet to copy and paste those questions into your spreadsheet

## 7. PullData Tables

Finally, we want to add a geopoint and use the latitude and longitude in the table to draw the provider office on a map.

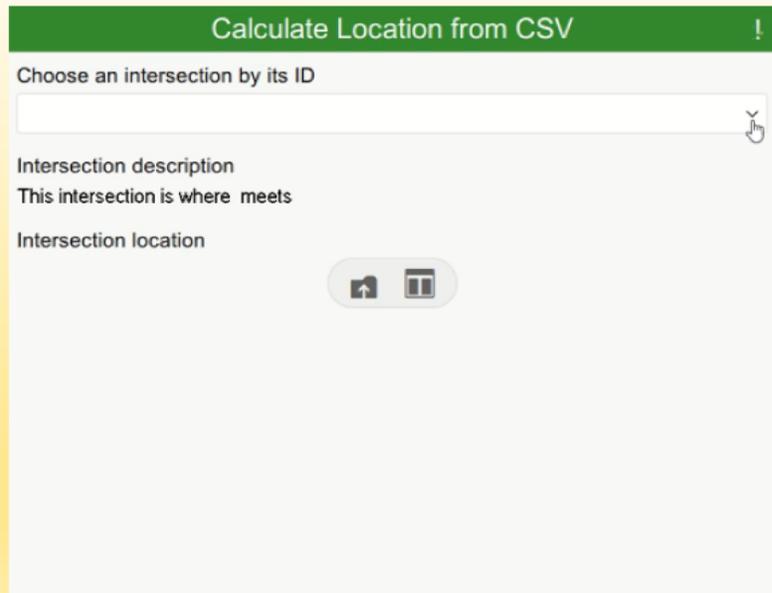
- 13 Close the Survey (leave the Excel spreadsheet open)
- 14 Click on 
- 15 Call your survey LocationExamples
- 16 Click on Samples and do a search for "location"
- 17 Select "Calculate Location from CSV" and then click on Create Survey



## 7. PullData Tables

Finally, we want to add a geopoint and use the latitude and longitude in the table to draw the provider office on a map.

- 18 Try out and see how the LocationExample Survey works



## 7. PullData Tables

Finally, we want to add a geopoint and use the latitude and longitude in the table to draw the provider office on a map.

- 19 Open the spreadsheet for your new LocationExample survey to see how finding this works:

		C	D	
1		label	hint	calculation
2	select_one intersections	intersections	Choose an intersection by its ID	
3	calculate	lat		pulldata('Intersections', 'Lat', 'IntersectionID', \${intersection_id})
4	calculate	lon		pulldata('Intersections', 'Long', 'IntersectionID', \${intersection_id})
5	calculate	locationcalculation		concat(number(\${lat}), ' ', number(\${lon}))
6	calculate	street1calculation		pulldata('Intersections', 'Street1', 'IntersectionID', \${intersection_id})
7	calculate	street2calculation		pulldata('Intersections', 'Street2', 'IntersectionID', \${intersection_id})
8	note	intersection_desc	Intersection description	concat('This intersection is where ', \${street1calculation}, ' and ', \${street2calculation}, ' meet')
9	geopoint	location	Intersection location	\${locationcalculation}

3. A new variable (mailbox) is created called "locationcalculation"

1. The pulldata function is used to grab the latitude and longitude from a table

2. This example uses intersections. We will again use the Provider's Name

5. Finally the geopoint!

6. "Feed in" the formatted Lat/long

4. Lat and long are concatenated in a specific way Survey123 understands

## 7. PullData Tables

Finally, we want to add a geoint and use the latitude and longitude in the table to draw the provider office on a map.

- 20 Copy the 4 highlighted rows from the spreadsheet for the “LocationExample” survey into the Boise Primary Care Doctors survey. Paste the rows below the rows you already have

	A	B	C	D	J
1	type	name	label	hint	calculation
2	select_one intersections	intersection_id	Choose an intersection by its ID		
3	calculate	lat			pulldata('Intersections', 'Lat', 'IntersectionID', \${intersection_id})
4	calculate	lon			pulldata('Intersections', 'Long', 'IntersectionID', \${intersection_id})
5	calculate	locationcalculation			concat(number(\${lat}), ', ', number(\${lon}))
6	calculate	street1calculation			pulldata('Intersections', 'Street1', 'IntersectionID', \${intersection_id})
7	calculate	street2calculation			pulldata('Intersections', 'Street2', 'IntersectionID', \${intersection_id})
8	note	intersection_desc	Intersection description		concat('This intersection is where ', \${street1calculation}, ' meets ', \${s
9	geoint	location	intersection location		\${locationcalculation}

## 8. PullData Tables

Finally, we want to add a geoint and use the latitude and longitude in the table to draw the provider office on a map.

- 21 Close the Location Example survey and reopen the Boise Primary Care Doctor’s Survey. Fix up the pulldata functions (hint, copy the pulldata function from an earlier questions and then edit the “Lat” and “Long”). The new rows should look as follows:

calculate	lat			pulldata('Providers', 'Lat', 'Name', \${DoctorsName})
calculate	lon			pulldata('Providers', 'Long', 'Name', \${DoctorsName})
calculate	locationcalculation			concat(number(\${lat}), ', ', number(\${lon}))
geoint	location	Location		\${locationcalculation}

- 22 Save your survey, and test out the new functionality: does the location show up once you select a provider?

## 7. PullData Tables

Finally, we want to add a geopoint and use the latitude and longitude in the table to draw the provider office on a map.

- 20 Copy the 4 highlighted rows from the spreadsheet for the "LocationExample" survey into the Boise Primary Care Doctors survey. Paste the rows below the rows you already have

	A	B	C	D	J
1	type	name	label	hint	calculation
2	select_one intersections	intersection_id	Choose an intersection by its ID		
3	calculate	lat			pulldata('Intersections', 'Lat', 'IntersectionID', \${intersection_id})
4	calculate	lon			pulldata('Intersections', 'Long', 'IntersectionID', \${intersection_id})
5	calculate	locationcalculation			concat(number(\${lat}),',', number(\${lon}))
6	calculate	street1calculation			pulldata('Intersections', 'Street1', 'IntersectionID', \${intersection_id})
7	calculate	street2calculation			pulldata('Intersections', 'Street2', 'IntersectionID', \${intersection_id})
8	note	intersection_desc	Intersection description		concat('This intersection is where ',\${street1calculation},', meets ',\${s
9	geopoint	location	Intersection location		\${locationcalculation}

## 7. PullData Tables

- 21 Test out your survey in Survey123 Connect.
- 22 Click on  set preview map zoom level to 9, and the Detailed map to zoom level 16
- 23 Publish your Survey



Survey title not set !

What is the physician's name?

What is your NPI Number?

What is your Address?

What is your Gender?

Accepting or Not Accepting New Patients?

What Language do you speak?

Location

## 7. PullData Tables

# Watch out for Comma's!

Noticing unexpected behavior with your pulldata table? The culprit is most likely a comma

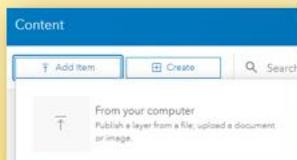


	A	B	C	D	E	F	G
1	<b>NPI</b>	<b>Name</b>	<b>Description</b>	<b>Accepting</b>	<b>Gender</b>	<b>Language</b>	<b>USPSAddress</b>
2	1083033102	Allyson Reynolds	Primary Care	accepting	Female	English	305 E Jefferson St, Boise, Idaho, 83712
3	1154733244	Amos Haley	Primary Care	accepting	Male	Spanish	6165 W Emerald St, Boise, Idaho, 83704
4	1053719161	Anna Martsenyuk	Primary Care	accepting	Female	English	6950 W Emerald St, Boise, Idaho, 83704

Use the **replace** function in MS Excel to replace all commas with spaces

## 8. Create a Launch Map

- 1 Open up ArcGIS Online (hint: open browser and visit [www.arcgis.com](http://www.arcgis.com)). Sign in.
- 2 Click on **Content** along the top, and then on Add Item From your computer:



- 3 Click on Choose File and select the Providers.csv spreadsheet. Give your new feature layer a title and tags as shown on the right

Add an item from your computer

File:  Providers.csv

Title:

Categories:   
+ Assign Category

Tags:

## 8. Create a Launch Map

4 Finish up dialog box as shown on the right. Note that by default ArcGIS Online picked to locate features by coordinates, and then matched the Lat and Long fields with the Latitude and Longitude Location fields.

5 Click **Add Item**

6 Click **Open in Map Viewer**

7 Symbolize by single location. Pick a symbol you like:



Add an item from your computer

Tags: Primary Care X Boise X Temp X

Add tags

Publish this file as a hosted layer.

Locate features by:  
 Coordinates  Addresses or Places  None, add as table

Review the field types and location fields. Click on a cell to change it.

Field Name	Field Type	Location Fields
USPSAddress	String	Not used
Lat	Double	Latitude
Long	Double	Longitude

Time Zone: (UTC) Coordinated Universal Time

Add Item Cancel

## 8. Create a Launch Map

8 Save your map **Save**

Save Map

Title: Primary Care Providers in Boise Web Map

Categories: + Assign Category

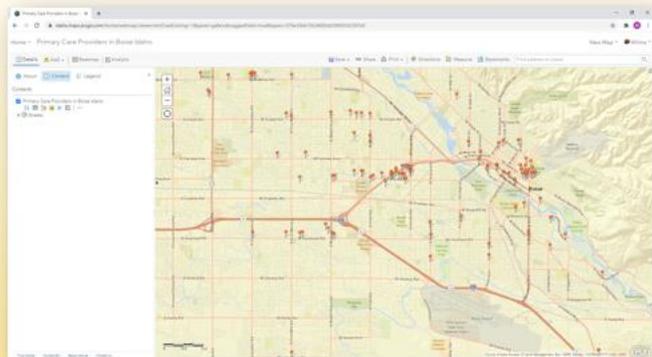
Tags: Primary Care X Boise X Temp X

Add tags

Summary: Description of the map.

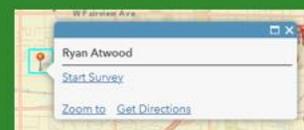
Save in folder: wrobertson\_its

SAVE MAP CANCEL



Next, we want to configure the pop-ups so that they have a link that

- Fires up Survey123
- Passes along the name of the Doctor



## 8. Create a Launch Map

Field Names in the Survey:

type	name	label
select_one	Name	
	DoctorsName	What is the physician's name?

Field Names in ArcGIS Online:

### Configure Attributes

Check the fields you want to display. Select a field to change its alias

<input type="checkbox"/> Display	Field Name	Field Alias
<input checked="" type="checkbox"/>	[NPI]	NPI
<input checked="" type="checkbox"/>	[Name]	Name
<input checked="" type="checkbox"/>	[Description]	Description

### Survey123 App

Open the Survey123 App

Open the survey with this specific ID

Pass those values {from ArcGIS Online} into Survey123

`arcgis-survey123://?itemID=d012f55b8b014d4090821eed1020c257&field:DoctorsName={Name}`

### Browser

`https://survey123.arcgis.com/share/d012f55b8b014d4090821eed1020c257?field:DoctorsName={Name}`

Open browser / survey123 website

The unique id for **your** survey

After the ? You pass your parameters

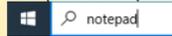
Info for the slide below:

`arcgis-survey123://?itemID=d012f55b8b014d4090821eed1020c257&field:DoctorsName={Name}`

`https://survey123.arcgis.com/share/d012f55b8b014d4090821eed1020c257?field:DoctorsName={Name}`

## 8. Create a Launch Map

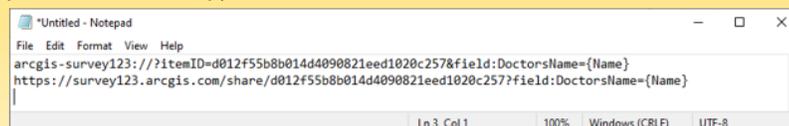
9 Open up the notepad add (Hint: type notepad in your windows search in the bottom left-hand corner of your screen)



10 Copy and past the following the following two lines from the instructions for this class into notepad:

```
arcgis-survey123://?itemID=d012f55b8b014d4090821eed1020c257&field:DoctorsName={Name}
https://survey123.arcgis.com/share/d012f55b8b014d4090821eed1020c257?field:DoctorsName={Name}
```

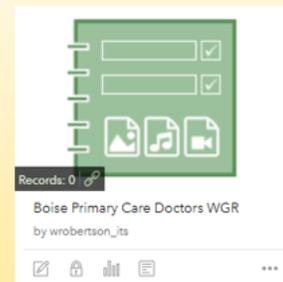
11 Format your notepad app so that each URL appears on one line:



## 8. Create a Launch Map

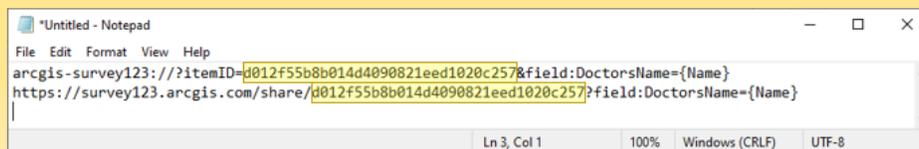
- 12 Log into [www.survey123.arcgis.com](http://www.survey123.arcgis.com) and sign in with your credentials
- 13 Click on [he Boise Primary Care Doctors](#) icon to open the survey.
- 14 Note the id in the URL:

[survey123.arcgis.com/surveys/d012f55b8b014d4090821eed1020c257/overview](https://survey123.arcgis.com/surveys/d012f55b8b014d4090821eed1020c257/overview)



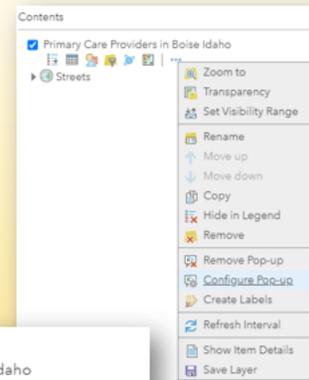
Copy the id (as highlighted above) and use it to replace the id's for both lines in your Notepad app:

15



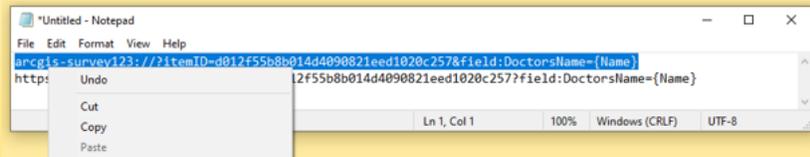
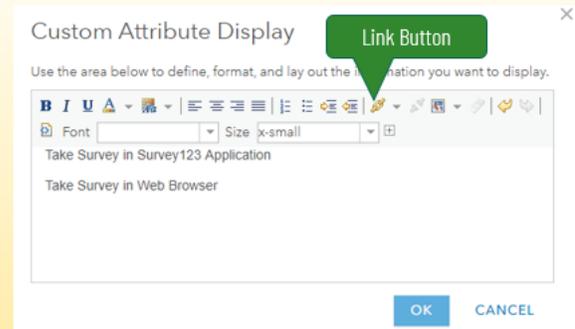
## 8. Create a Launch Map

- 16 Leave your notepad app open, and go back to your web map showing the location of primary care givers in Boise
- 17 Click on ... and then click on Configure Pop-up for the Primary Care Providers in Boise Idaho layer
- 18 Set the Pop-up Title to {Name}
- 19 For Display choose "A custom attribute display"
- 20 Click on Configure



## 8. Create a Launch Map

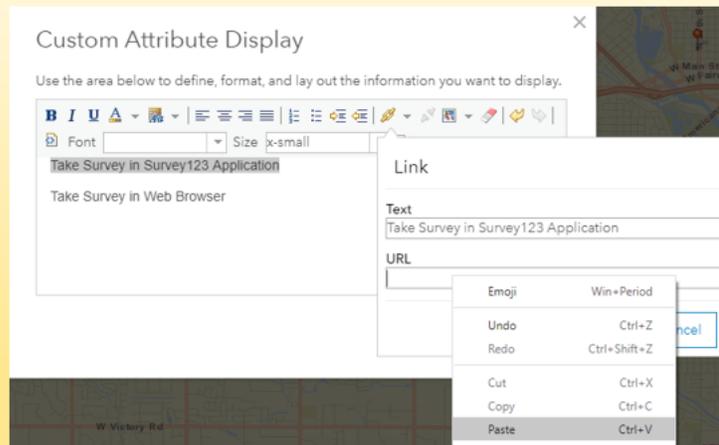
- 21 Type in the two lines as shown on the right
- 22 In notepad highlight the first line, right-click and choose "Copy"



- 23 Back in ArcGIS Online, highlight "Take Survey in Survey123 Application" and click the Link Button

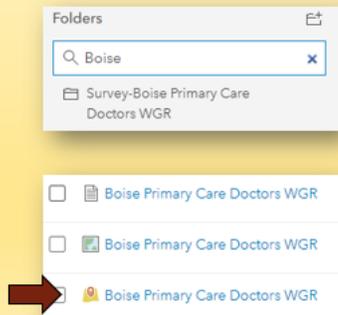
## 8. Create a Launch Map

- 24 Paste the URL you just copied from Notepad into the URL box in ArcGIS Online
- 25 Click Update
- 26 In Notepad select and copy the second URL
- 27 Highlight "Take Survey in Web Browser in ArcGIS Online, click the link button and then paste the URL in the URL box
- 28 Click Update



## 9. Launch Surveys

- 1 Try out the pop-up. Do both links work?
- 2 Take about 5 Surveys



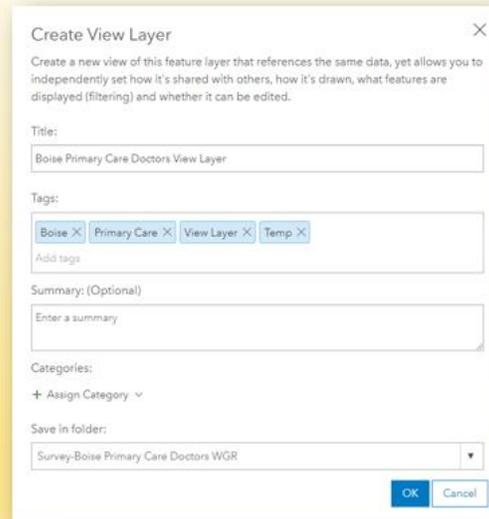
- 3 To protect our original survey data, we will create a view that cannot be edited. Search for a folder that contains the word Boise. Open that folder.
- 4 Click on the Boise Primary Care Doctors feature service
- 5 Click on 

Next it would be nice to keep track of which doctor's have completed their survey, and which ones have not.

~ We will do this by adding the collected data to our original map

## 9. Launch Surveys

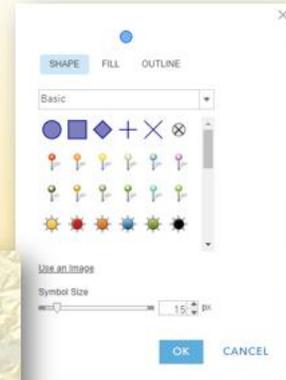
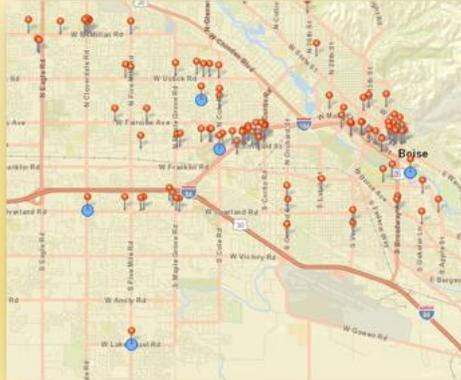
- 6 Complete the Title and Tags. Click OK
- 7 Return to your Web Map. (Hint: click on Content along the top of the Screen and then find your web map)
- 8 Click Add > Search for Layers > My Content and add the Boise Primary Care Doctors View Layer you just created. Hint: you should see 5-6 points for the surveys you collected in step 2 on the previous slide



## 9. Launch Surveys

9 Symbolize the points representing the completed surveys. And move this layer underneath the “launch points”. Now it is easy to see which surveys have been completed

10 Save your map, and keep it open for the next exercise



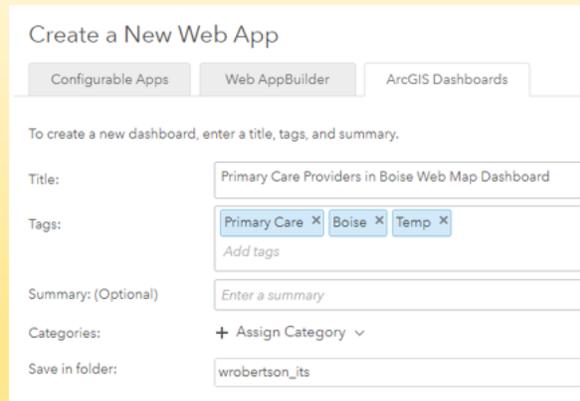
## 10. Put it all in an App

1 Click on [Share](#). Because this is just an exercise there is no need to share it with others.

2 Click on [CREATE A WEB APP](#). If you just want to share a simple app that allows people to launch surveys from a web browser choose “Web App Builder”, leave most of the defaults, Save the app and then launch it. For something different, please click on

[ArcGIS Dashboards](#)

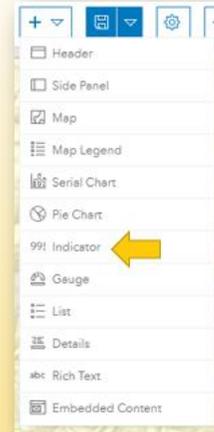
3 Format the title and then click Done



## 10. Put it all in an App

- 4 Click on + and then on 99! Indicator
- 5 Click on Primary Care Providers in Boise Idaho

Layers from 'Primary Care Providers in Boise Web Map' map:



## 10. Put it all in an App

**Data Options**

Value  
Layer: Primary Care Providers in Boise Idaho  
Filter: + Filter  
Value Type: **Statistic** Feature  
Statistic: Count  
Value Conversion:   
Reference: None  
Reference Type: None

**Indicator Options**

Top Text: Number of Providers  
Middle Text: [value]  
Bottom Text: [value]

**General Options**

Name: Indicator (1)  
Title: [Edit]  
Description: [Edit]  
Text Color: [Color Picker]  
Background Color:   
Last Update Text:   
No Data: [Color Picker]  
Label: [Color Picker]  
Show Title:   
Show Description:

7A. Note that the indicator will show how many records there are in this layer (Count)

7B. On Indicator Tab type in "Number of Providers"

7C. Uncheck "Last Update Text"

7D. Click Done

## 10. Put it all in an App



- 8 In the top left of the indicator you just created click on "Duplicate"
- 9 For the new indicator click on Configure
- 10 On the Data tab click on 
- 11 Click on Boise Primary Care Doctors View Layer



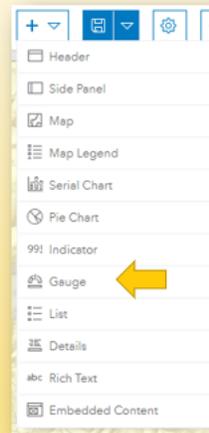
Layers from 'Primary Care Providers in Boise Web Map' map:

-  Primary Care Providers in Boise Idaho
-  Boise Primary Care Doctors View Layer

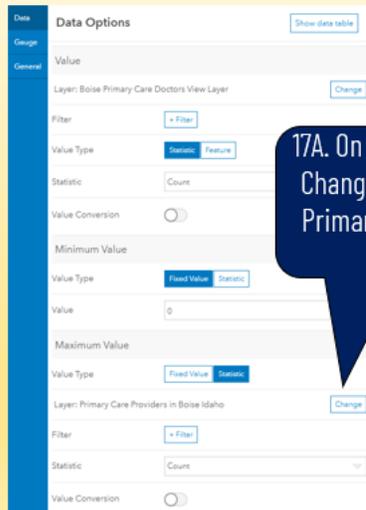
- 12 On the Indicator tab (see left-hand side) change "Number of Providers" to "Surveys Completed"
- 13 Use the drag item button to move both new indicators to the right-hand side of the map

## 10. Put it all in an App

- 14 Save your dashboard
- 15 Click on the + and then add a Gauge.
- 16 Click the Boise Primary Care Doctors View Layer



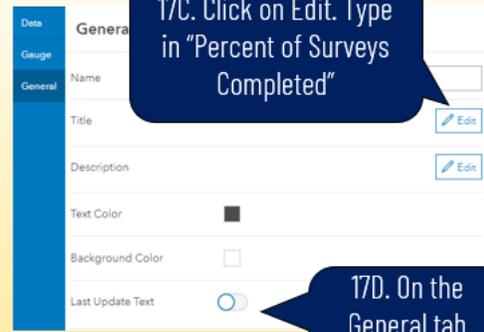
## 10. Put it all in an App



17A. On the Data tab click Change and choose the Primary Care Providers in Boise



17B. On the Gauge tab choose "As Percentage"



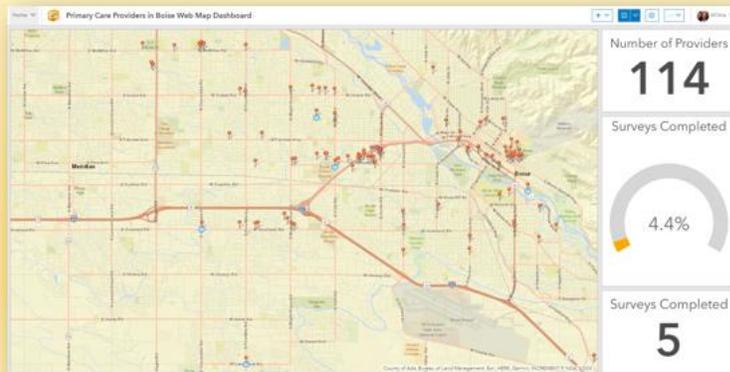
17C. Click on Edit. Type in "Percent of Surveys Completed"

17D. On the General tab unselect "Last Updated Text"

17E. Click "Done"

## 10. Put it all in an App

- 17 Drag the Gauge in a place you like and save your dashboard.
- 18 Save your Dashboard. Can you still launch surveys? If so, take another survey. Does the dashboard update?



# Dashboards

ISDA Policy tracking dashboard - Thadd Strom (ISDA)  
 Covid-19 Cases, Deaths and Vaccines in Idaho - Wilma Robertson (ITS)  
 Effect of COVID-19 on Traffic Patterns - Will Thoman (ITD)  
 IDL Fire Bureau Dashboard - Robin Dunn (IDL)  
 What's new with Dashboards - ESR

Tuesday 2/23  
 3 - 4 PM MTN  
 Start meeting  
 +1-415-655-0001  
 Passcode: 1330468726

## Workshop

# Upcoming Events

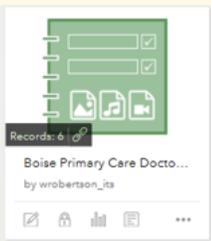
## Introduction to Dashboards

February 25, 2021

Wilma.Robertson@its.idaho.gov

## 11. Downloading Survey Results

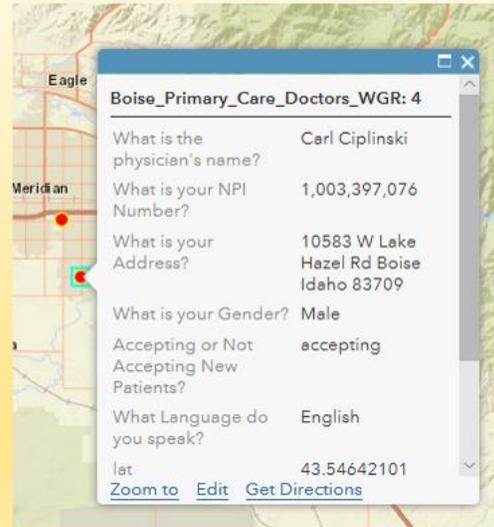
- 1 Open <https://survey123.arcgis.com> and sign in
- 2 Click on the Boise Primary Care Doctors icon to open the survey
- 3 Click on Analyze:



- 4 The Analyze tab allows you to get an overview and stats for the submitted surveys.
- 5 Click on **Data**
- 6 Click on **Open in Map Viewer**

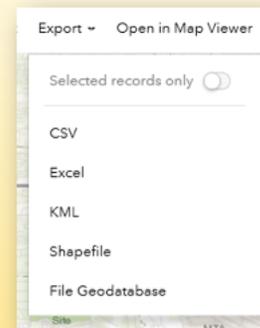
## 11. Downloading Survey Results

- 7 Click on any of the doctors on the map.
- 8 Click on Edit along the bottom of the Pop-up. Note that you this is where you can make edits to the collected data  
Click on [CLOSE](#) to save any edits you made, or click on [DELETE](#) to get rid of a particular survey response altogether
- 9 Click on the  in the top-right corner of the map to close the map viewer



## 11. Downloading Survey Results

- 10 Click on Export and note the options for exporting the collected survey information.
- 11 Click on Excel and note that the downloaded file appears at the bottom of your screen
- 12 Open the Excel file. Thinking back to your survey in Survey123 Connect, do the column headers match the Name or the Label field? Leave the website up for the next section.



type	name	label
select_one	Name	DoctorsName
integer	NPI	NPI
text	Address	Address
text	Gender	Gender
text	Accepting	Accepting or Not Accepting New Patients?
text	LanguageSpoken	Language Spoken

## 12. Designing and Naming Custom Reports

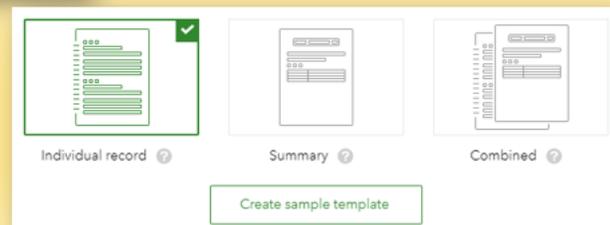
- 1 Click on **Report** (hint: just to the left of export)

Before you can generate reports, you need to set up a template:

### 2. Select a template

This survey does not have a report template yet. Use [Manage templates](#) to create your first template.

- 2 Click on "Manage templates"
- 3 We will start with one report for each submitted survey. Click on Create sample template



## 12. Designing and Naming Custom Reports

- 3 Click on "Manage templates"

We will start with one report for each submitted survey. Click on Create sample template.

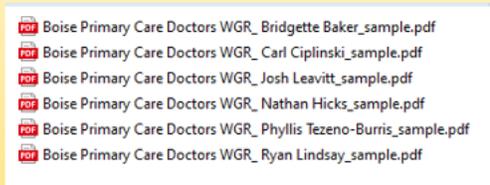
- 4 Before editing the template, let's first see what the default report looks like. Follow the steps on the right.

4C. Click on Show Credits. One credit is \$0.10. How will those reports cost?

A screenshot of the 'Report' configuration form. It includes sections for '1. Choose records to include' (with radio buttons for 'Selected records only (1)' and 'All records in the table (6)'), '2. Select a template' (with a dropdown menu), '3. Output settings' (with fields for 'File options', 'Report name', 'Save to my ArcGIS account', and 'Format'), and a 'Generate' button. Callouts point to specific elements: '4A. Select all records in the table' points to the 'All records in the table (6)' radio button; '4B. Replace contents of {} with DoctorsName' points to the 'Report name' field; '4D. Click on Preview Sample Report' points to the 'Generate' button.

## 12. Designing and Naming Custom Reports

- 5 Open the zip file that appears near the bottom of the screen once it is done generating those reports
- 6 What did the `{DoctorsName}` do to the reports?



- 7 Open one of the reports to see how it is formatted

Survey title not set  
Submitted By: wrobertson\_js  
Submitted Time: February 8, 2021 11:27 AM

**What is the physician's name?**  
Bridgette Baker

**What is your NPI Number?**  
1265693386

**What is your Address?**  
12400 W Overland Rd Boise Idaho 83709

**What is your Gender?**  
Female

**Accepting or Not Accepting New Patients?**  
accepting

**What Language do you speak?**  
English

**lat**  
43.59037914

**lon**  
-116.3339753

locationcalculation

## 12. Designing and Naming Custom Reports

- 8 Click again on `Report` and then on `Manage templates`
- 9 Click on Download sample template. Choose the template for the individual record. Open the template in MS Word.



## 12. Designing and Naming Custom Reports

10 Click [Quick reference](#), and note some of the formatting options you have

11 Open Primary Care Provider Condensed Template.docx in the exercise data. Note the formatting. You can format this any way you like

**Primary Care Doctor in Boise Survey: \${DoctorsName}**

**General Information**

<b>NPI Number:</b>	\${NPINumber}	<b>Gender:</b>	\${Gender}
<b>Address:</b>	\${Address}	<b>New Patients:</b>	\${Accepting}
		<b>Languages:</b>	\${LanguageSpoken}

**Location**  
\${location}

## 12. Designing and Naming Custom Reports

12 Save the Primary Care Provider Condensed template with any changes you just made. Close MS Word.

13 Back on the Survey123 website click on [+ New template](#)

14 Browse to the MS Word file you just saved. Click on Save.

**Manage Templates**

Report template file \* [Select another file](#)  
Primary Care Provider Condensed Template.docx

**Name \***  
Primary Care Provider Condensed Template.docx

**Summary**  
Add a brief summary about the template

[← Back](#) [Check syntax](#) [Save](#)

## 12. Designing and Naming Custom Reports

- 15 Browse to the MS Word file you just saved. Click on Save. Click on preview sample report

**Primary Care Doctor in Boise Survey: Nathan Hicks**

**General Information**

<b>NPI Number:</b>	1144667817	<b>Gender:</b>	Male
<b>Address:</b>	6000 W Denton St Boise Idaho 83704	<b>New Patients:</b>	accepting
		<b>Languages:</b>	English

**Location**

**1. Choose records to include**

Selected records only (1)  
 All records in the table (6)

**2. Select a template** [Manage templates](#)

Primary Care Provider Condensed Template.docx

**3. Output settings**

File options

Split

Report name \*

Boise Primary Care Doctors WGR\_ \${DoctorsName}

Save to my ArcGIS account

wrobertson\_its root folder

Format

Microsoft Word (.docx)

[Show credits](#) Recalculation is needed.

[Preview sample report](#)

## 12. Designing and Naming Custom Reports

```

<summary>
    Primary Care Doctors in Boise, Idaho
    Selected record count: ${Boise_Primary_Care_Doctors_WGR|stats:"count,objectid"}
    Total record count:
    ${Boise_Primary_Care_Doctors_WGR|where:"1=1|important"|stats:"count,objectid"}
    Use important to apply the filter to all responses, rather than just the responses selected for this report.
    Recent 3 records:
    You can reference any field from your survey in the table.
    
```

Object Id	Submitted by	Submitted time
\${Boise_Primary_Care_Doctors_WGR orderByFields:"objectid DESC" resultRecordCount:3}\${objectid}	\${Creator }	\${CreationDate}\${/}

```

    A summary section can also be put at the end of the report.
</summary>
    
```

**Primary Care Doctors in Boise, Idaho**

**Selected record count:** 6  
**Total record count:** 6

*Use important to apply the filter to all responses, rather than just the responses selected for this report.*

**Recent 3 records:**

*You can reference any field from your survey in the table.*

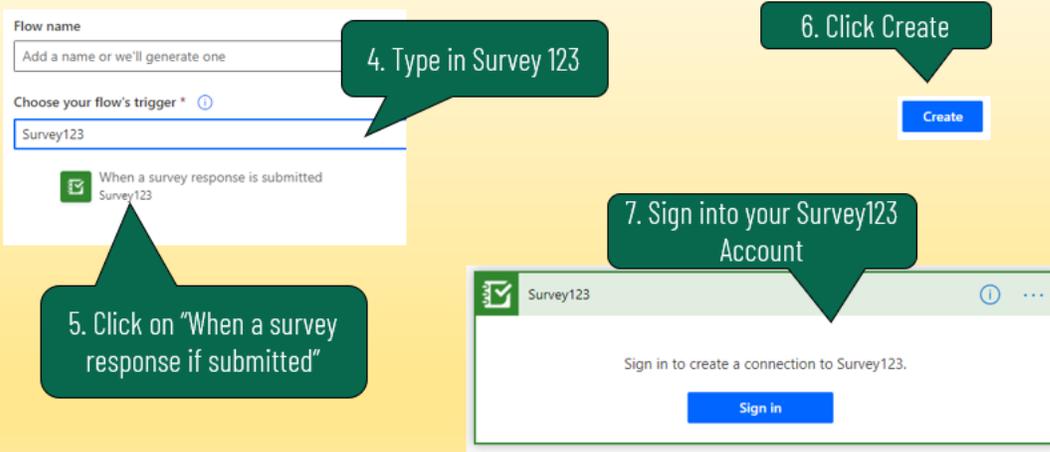
Object Id	Submitted by	Submitted time
6	wrobertson_its	February 8, 2021 1:44 PM
5	wrobertson_its	February 8, 2021 11:28 AM
4	wrobertson_its	February 8, 2021 11:28 AM

*A summary section can also be put at the end of the report.*

## 14. Setting up a Web Hook



## 14. Setting up a Web Hook



## 14. Setting up a Web Hook

The screenshot shows the Microsoft Flow interface. On the left, a trigger is set to 'When a survey response is submitted'. Below it, a list of surveys is shown under 'Choose a survey', including 'AGOL 1 Your favorite Vacation Spot', 'AGOL Training Interest Gauger', and 'Boise Primary Care Doctors WGR'. A callout bubble points to this list with the text '8. Pick your survey from the list'. On the right, the 'Choose an action' pane is open, showing a search bar and a grid of connectors. A callout bubble points to the 'Office 365 Outlook' connector with the text '9. Click on Office 365 Outlook (or whichever email you have)'. Below the grid, the 'Send an email (V2)' action is selected, and a callout bubble points to it with the text '10. Pick send an email (V2) from the list'.

## 14. Setting up a Web Hook

The screenshot shows the configuration for the 'Send an email (V2)' action. The 'To' field is filled with 'Wilma.Robertson@its.idaho.gov'. The 'Subject' field contains 'Someone just submitted a new survey ( feature attribut... X )'. The 'Body' field contains 'A new survey was submitted'. A callout bubble points to the subject field with the text '12. Note that you can include values from the survey itself'. Below the configuration, a 'Save' button is visible, with a callout bubble pointing to it and the text '13. Click Save'. To the right, a smaller version of the flow configuration is shown, with a callout bubble pointing to the 'Send an email (V2)' action with the text '11. Format what the automated email should look like'.